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Arizona State
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E-Newsletter

SMART BOARDS = INDEPENDENCE FOR YOUNG LEARNERS

Research studies suggest a connection between student interest and actual learning. Attention, concentration and feelings of surprise, excitement and enjoyment are all important indicators of student interest in learning according to Dr. Raja Maznah, professor at the University of Malaya and the head of the SMART education program. When children's curiosity increases, they want to know more information to answer their uncertainties. Technology has been proven to spark an interest for many children, especially in the classroom. Many schools have started thinking of ways to bring the benefits of technology into their classrooms (Sani, 2007). SMART Boards is a first idea that comes to mind



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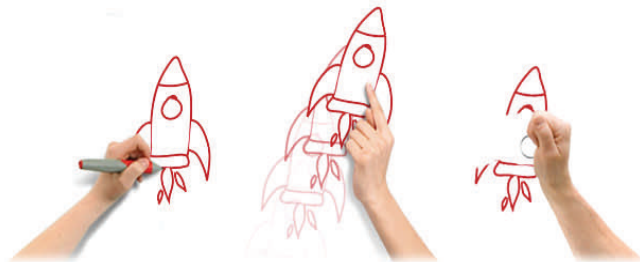
COMING SOON !!! **PG
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SMART
Technologies Inc.



What is a SMART Board?

The SMART Board was developed in 1991 by a company called SMART Technologies. It is an interactive whiteboard that displays images from a projector, to a computer, to the board. It varies in size and can be mobile or attached to the wall (Preston and Mowbray, 2008). The cool thing about SMART Boards is that it is completely touch screen. SMART Boards come with pre-loaded images, videos, and activities, which is ideal for teachers because it makes their lessons easier to build and more fun to teach. However, all pre-loaded activities must be downloaded before using. It also comes with internet access, so users are able to download various types of programs directly to their SMART Boards for different websites. Students really enjoy SMART Boards simply because they are in control. It gives them a chance to do something independently. With the touch of their little fingers, they are able to move objects around on the screen, color, draw, touch certain objects to produce sounds, etc. While working on the whiteboard, children can explain what they are doing and their explanations can be saved for future use. The SMART Board can also be used to take attendance, keep a classroom schedule, and even assist with group activities.



It is often challenging to get children engaged in learning due to short attention spans, lack of interest, or different learning styles. Some children are visual learners, while others learn auditorily or kinesthetically. The SMART Board is designed to engage all students through all three learning styles (Sani, 2007). Many children are not able to receive several instructions at one time, especially young children. A power point presentation with animation can be used with the SMART Board to give instructions. This approach provides children with visual and verbal cues to help them get a better understanding. Assessments can also be done on the SMART Board. This is good for children who aren't highly developed in reading and writing skills. ESL (English as a Second Language) students are able to benefit from this device to complete tasks whereas they may have been struggling with pen and paper based tasks before (Preston and Mowbray, 2008).

SMART Boards in child care centers

Child development is a process that all children go through. Children develop skills in five main areas of development:

Cognitive Development- a child's ability to learn and solve problems

Social and Emotional Development- a child's ability to interact with others

Speech and Language Development- a child's ability to understand and learn language

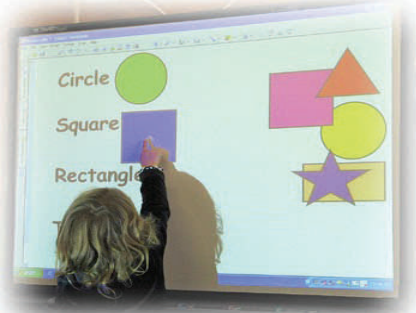
Fine Motor Skills- a child's ability to use small muscles, specifically their hands and fingers, to pick up small objects, hold a spoon, turn pages in a book, or use a crayon to draw.

Gross Motor Skills- a child's ability to use large muscles by walking, running, jumping, lifting, etc. (<http://www.howkidsdevelop.com/developSkills.html>)

There is a lot of research being done about the SMART Board and its impact on older children but few research studies include children at the preschool level. However, current research is exploring the use of SMART Boards in increasing preschoolers' use of skills in these five developmental areas.

Certainly SMART Board Technology Can Help!!!

First and foremost, motor skills are important. These skills are considered as the earliest developments in a child's life. Since the SMART board is completely touch screen, children are able to lift their arms and use their fingers to work on the SMART Board. With desktop computers you have to use a mouse which is not developmentally possible for most children. When using the SMART Board, the children use their fingers which is not only beneficial but also developmentally appropriate.



SMART Boards in child care centers continued...

SMART boards promote interaction between children. Children can work together anywhere on the smart board without being limited to only one area. Each child can perform different actions at the same time. For example, one child can move objects around while the other writes or draws. Children can create pictures together which is exciting for preschoolers. Through this interaction, children have the opportunity to see, hear, and touch which helps with learning and problem solving. Language can be developed in preschoolers while using the SMART Board as well. Children in preschool sometimes have the same difficulties with speech. For example, the “r” pronunciation may be used with a “w”. Of course children learn speech from other children but they also learn through visual aids. One way to help preschool children practice speech is to use Power Point. Power Point is similar to using flashcards. Each slide could have a word and a picture pertaining to the sound that the child is trying to learn. This activity used on the SMART Board allows children to practice speech and to provides reading opportunities (http://www.ehow.com/list_7674338_articulation-activities-smart-boards.html). Another way to encourage speech is to have children explain what they are doing on the SMART Board. This gives children a chance to use their words and to express themselves.



SMART Boards are helpful to all children, of all ages, of all abilities. The major impact that it has on children is that the ability to hold their attention. Preschoolers have short attention spans, so this is very important. A special education teacher in Asia decided to give the SMART board a chance. She (Woo Yoke Lin) stated that the board enhanced interactive learning between the children, regardless of their disability. The children didn't really communicate with each other and were often distracted when she was working with another student. However, the SMART board helped them to stay focused during activities (Low, 2009).

SMART Boards in child care centers continued...

Upper Canada District School started a program called SMART Inclusion. The question that helped develop this program was “What if the district could develop a way to create whole-class learning experiences for students with special needs.” This program promotes all children learning together, regardless of their disabilities, while using technology. The project started out with 12 students who had autism and cerebral, and were placed in a “regular” education classroom. The SMART board was introduced to the class and worked a miracle for the teachers as well as the students. Alexandra Dunn, a Speech-Language pathologist had a goal for this project which was to teach these students through differentiated instruction. Differentiated instruction is developing a lesson/activity so that every child could learn and understand regardless of the difference in abilities (http://en.wikipedia.org/wiki/Differentiated_instruction). She decided to use assistive devices such as voice output devices, switches, and inclusive learning software to assure that all students can participate in lessons on the SMART Board. This board gives special need students a chance to participate in activities and feel confident in learning with other students. After 10 months of using the SMART Board for the SMART Inclusion project, teachers felt like this device was exactly what they needed. They stated that they were doing more teaching and less behavior management. One teacher took pride in one of her students that was nonverbal but was speaking in full sentences after 10 months of using the SMART Board. (Hamill, 2010)



Try these programs on your SMART Board

Keep in mind that the SMART board provides you with internet access, so all activities must be downloaded before using. Your one stop shop to loads and loads of free, downloadable programs and resources can be found at www.smarttech.com under SMART Exchange. Teachers can use this website to find all types of resources for students of all ages.

While there are a few, not many of the programs on this website are for preschool children. Below are a few websites that would be helpful to teachers and their preschool children.



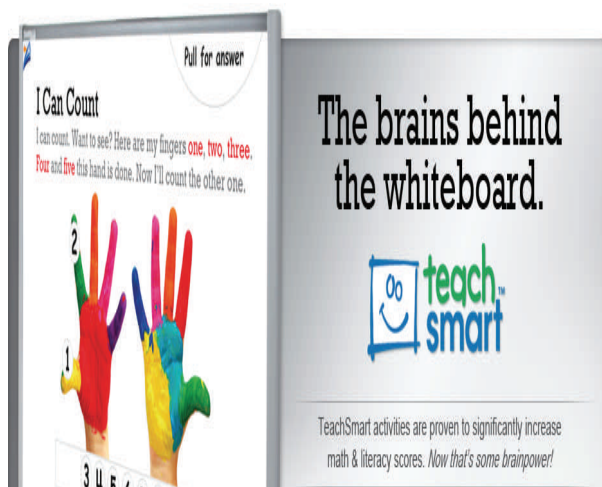
Starfall is a free educational website that emphasizes teaching children to read with phonics. Many children may benefit from this program, including English Language Learners. The phonics approach may be perfect for children in a variety of situations including preschool, k-2, special education, home-school, and English language development. The Starfall programs allow children to be creative and use their imaginations while they learn. All activities come with printouts for teachers to use when they are not working on the SMART Board. (<http://www.starfall.com/>)



Try these programs on your SMART Board continued...



Hatch provides supplies and technology for early learners. Products available are developmentally appropriate for preschoolers and designed to prepare children for a successful future. From classroom supplies and education materials, to adaptive learning technology and content, Hatch can help you create engaging learning environments for your little ones. (<http://www.hatchearlychildhood.com/>)



TeachSmart Learning System is a program on Hatch website that focuses on learning in Head Start classrooms. TeachSmart is easy for teachers, child-friendly and provides an learning environment for lasting results! Children enjoy exploring fun and engaging in curriculum activities found directly through this system. This cross-curricular, adaptive learning program for early learners is recommended for SMART technology, but can be used on all whiteboards. TeachSmart is described as ideal for preschoolers and

toddlers, English language learners, and at risk children in kindergarten, Head Start, or special education classrooms. (<http://www.hatchearlychildhood.com/Pages/teach-smart-interactive-whiteboard>)

A recent study was done in North Carolina to determine whether the TeachSmart Learning System used on a SMART Boards would have a significant impact on preschool children's learning of literacy and math skills. The children's knowledge increased from fall to spring in literacy, print knowledge, phonological awareness, emergent writing and mathematics skills. (<http://www.hatchearlychildhood.com/Pages/2011-jan-31-efficacy-study/>) Visit <http://www.hatchearlychildhood.com/efficacystudy> to download the entire study.



Try these programs on your SMART Board continued...



TAP•it is the first ADA compliant interactive learning station designed to recognize the difference between an arm resting upon the screen and a finger or assistive device intentionally tapping an image. This fun-filled device was developed so students with special needs can work at their own pace. TAP-IT may be used alone or as an interface with other programs by allowing children to transfer skills to other computer-based learning applications utilizing the Internet, educational software or communication devices. The device is adjustable allowing it to be positioned for access by children using wheelchairs, walkers or other mobility devices which provides users with full access to the screen. (<http://www.teachsmart.org/tapit/about.html>)



Try these programs on your SMART Board continued...



ABCya.com is a free educational website for kids that includes computer games and activities for Pre-K and elementary students to learn on the web. It has a lot of cool educational games for children in Kindergarten. Kindergarten children's computer games & activities feature large and easy-to-use navigation buttons as well as voice instructions. Games and activities include: alphabetical order, upper-case and lower-case letters, counting numbers, connect the dots, numerical order, shapes, addition, e-storybooks and holiday games. (<http://www.abcya.com/>)



WANT TO KNOW MORE? HELPFUL WEBSITES

www.smart-boards.com provides you with all the information you would need on SMART Boards. On this site you can view various types of Interactive Whiteboards and its many features and functions. You can also purchase accessories for the SMART Board. See also www.smartboard.com and www.smarttech.com for more details.

www.lakeshorelearning.com is a website that offers various educational products to use on the SMART Board. They offer products for language and literacy, mathematics, and science and social studies.

www.scholastic.com is your one stop teacher shop that offers all types of resources for Pre-K to 12 grade. On this website, you can find lesson plans, software for SMART Boards (many which are free), teacher forums where you could discuss ideas and solutions, and much more.

www.exchange.smarttech.com allows you to search and download resources for free, share resource ideas, standards correlated lessons, join communities, and training opportunities. This site provides lesson plans for the SMART Board and connect with teachers. Some of the subjects that are available are art and design, language arts, geography, mathematics, science, foreign language, special education, and tons of other cool subjects.

You can also read several articles found at:

Use of SMART Boards for teaching, learning and assessment in Kindergarten science (<http://smartboardita.pbworks.com/f/smartboard+with+kindergartener.pdf>)

Creative means to bridge old and new teaching methods (http://findarticles.com/p/news-articles/new-straits-times/mi_8016/is_20071001/creative-means-bridge-teaching-methods/ai_n44376301/)

Speech Pathologists see results with SMART Products (<http://www.oghs.noacsc.org/EDFI%20585/Professional%20Development/TeacherDevelopment/Resources/AATR.pdf>)

SMART Board teaches little dragons (<http://www.kingmandailyminer.com/main.asp?SectionID=1&subsectionID=1&articleID=28498>)

Using SMART Boards to Enhance Student Learning (<http://www.rcetj.org/index.php/rcetj/article/view/59/93>)

Interactive Whiteboards and Learning (http://downloads01.smarttech.com/media/research/whitepapers/int_whiteboard_research_whitepaper_update.pdf)

First research study of Preschools using Hatch Interactive Whiteboard technology reveals significant gains in core literacy and math (<http://www.hatchearlychildhood.com/Pages/2011-jan-31-efficacy-study/>)

And if you're a little curious about how the SMART Board works, check it out on YouTube at http://www.youtube.com/results?search_query=Smart+boards

COMING SOON!!!

The Introduction of the SMART Table

Be on the lookout for the next newsletter as I introduce you to SMART Technology's interactive learning center



For more ideas to share please visit our website - <http://tnt.asu.edu/ideas>.

Do you have an idea that you'd like to share with others? Submit your idea with a picture and description, we'll put it on our website as a part of our Ideas to Share. To submit your idea, or if you have any questions, send an email to tanisha.dicks@jefferson.edu

Please feel free to forward this newsletter to any individuals or agencies that may benefit from information on assistive technology.

Questions? Comments? Want to have the newsletter sent directly to your inbox?
Email Tanisha at tanisha.dicks@jefferson.edu